Mr. Erck observed the outer satellite on the following night, when the position at the time named would be 65°, distance from centre of planet seventy-nine seconds, and two hours later the angle would have diminished to 53°, and the distance to sixty-one seconds, or roughly two diameters from the planet's limb as observed. On September 8 the angle was 71°, distance eighty-five seconds, so that the satellite may have been seen again this evening. So far as we know these are the first observations of a satellite of Mars in these islands, and it is singular that they have been made with an instrument constructed by the same optician as the great Washington telescope with which the satellites were discovered.

In the elements of the satellites transferred to this column last week from the Washington Circular, for major and minor axes of the apparent orbit it is necessary to read semi-axes.

VARIABLE STARS.—The following are geocentric minima of Algol and S Cancri, which will be observable in this country during the last quarter of the present year. The epochs are in Greenwich time, and depend upon Prof. Schönfeld's elements.

ALGOL.

		h.	m.			h.	m.			h.	m.
Oct.	2 ...	15	19	Nov.	11 ...	18	42	Dec.	4 ...	17	14
,,	5 ...	12	8	,,	14 ...	15	31	,,	7 ...	14	3
,,	8 ...	8	57	,,	17 ...	12	20	,,	10 ...	10	52
,,	11 ...	5	45	,,	20 ...	9	9	,,	13 ...	7	41
,,	22 ...	17	0	,,	23 ...	5	58	,,	24 ...	18	57
,,	25 ...	13	49					,,	27 ...	15	46
,,	28 ...	10	38					,,	30 ...	12	36
,,	31 ..	7	27								

S CANCRI.

		h.	m.			h.	m.
Oct.	16 ...	13	27	Dec.	12 ...	11	6
Nov.	4 ...	12	40	,,	31 ...	10	20
,,	23 ...	11	53				

MINOR PLANETS.—On August 11 M. Borrelly detected a new planet, which, it may be presumed, is identical with one seen by Prof. Watson on the 8th, though not identified as a planet until the 16th; this will be No. 174. The latter astronomer has since announced the discovery of No. 175 on September 3, in R.A., 23h. 10m., N.P.D. 89° 15′, eleventh magnitude.

Of the small planets which come into opposition during the last quarter of 1877, Iris attains the greatest degree of brightness, her magnitude in the middle of November being a little higher than the seventh. This planet, from proximity to the earth, will afford a favourable opportunity of applying Prof. Galle's method of determining the solar parallax, and with the view of facilitating observations, an ephemeris from Prof. Brünnow's tables will be given in this column before the end of the present month. The rough ephemeris of the *Berliner Jahrbuch* is not sufficient for practical purposes.

NOTES

THE health of M. Leverrier is so far restored that he is daily expected at the Paris Observatory to resume his official duties. The glass of the large refractor has been put in position, after having undergone repairs, and will be tested again before being silvered. Bischofsheim's transit instrument is in use, and works admirably. The magnetic instruments are also in operation in the new grounds given by the municipality. Magnetical observations are also taken at Montsouris Observatory with similar instruments, and at a distance of two kilometres. Both establishments are satisfied with eye observations.

ON August 14 Denmark celebrated the centenary of one of her most eminent sons—Hans Christian Oersted, born August 14, 1777, known all over the world as the discoverer of the laws of electro-magnetism. It was in 1813 that Oersted first published his investigations.

AT the recent biennial meeting of the German Astronomical Society, which was held at Stockholm, the members received the news of the discovery of the two satellites of Mars with manifestations of grave doubts. The president at their request telegraphed to the Berlin Observatory, and in reply received a copy of the original telegram as it was sent from America. The next meeting of the Society is fixed to take place at Berlin in 1879.

WE have received the "Programme et Règlement" of the International Congress of the Medical Sciences, which commenced its fifth session at Genoa on Sunday and will conclude on Saturday. This programme contains a feature which we have not noticed before in connection with any similar congress. All the usual information as to meetings of various kinds, sectional proceedings, excursions, &c., is given in a well-arranged form. In addition to this, under each section is given along with the titles of the papers to be read, a summary of the conclusions come to by the author on each question treated. These summaries are sometimes of considerable length, and we cannot but think that it is an advantage both to speaker and to hearers that the latter are thus instructed and interested beforehand, and so able to follow intelligently a speaker's line of thought. Although the association is to meet during a whole week, there are only twenty-four papers in all to be read, thus allowing ample time for discussion.

THE inaugural address of the meeting of German naturalists at Munich on the 17st inst. will be delivered by Dr. von Pettenkofer. The following is the latest list of the general lectures announced:—Prof. Dr. Waldeyer (Strassburg), on C. E. von Baer and his influence upon the history of evolution; Prof. Dr. Ernst Haeckel (Jena), on the evolution theory of the present day in its relation to science in general; Prof. Dr. G. Tschermak (Vienna), on the early history of the terrestrial globe; Prof. Dr. Klebs (Prague), on the revolution in medicinal views during the last decades; Dr. G. Neumayer (Hamburg), on meteorology in daily life; Dr. R. Avé Lallemant (Lübeck), on animal life in the Amazon River; Prof. Dr. S. Günther (Ansbach), on the latest researches made on the mathematico-historical domain; Prof. von Virchow has not yet fixed his subject.

THE third annual conference of the Cryptogamic Society of Scotland will be held at Dunkeld during October 10, 11, and 12. The president is Col. H. M. Drummond Hay, C.M.Z.S., and the secretary Dr. F. Buchanan White, F.L.S., Perth. The business of the conference will consist mainly in excursions, *conversazioni*, and an exhibition of specimens. The Society is now prepared to issue a First Century of "Fungi Scotici Exsiccati," which will contain many of the new species and rarities recently discovered. The subscription price is 1*l.* 1*s.*

THE Munich Society of Antiquaries has resolved to hold yearly exhibitions after the manner of those of our South Kensington Museum. Each exhibition will be devoted to a different branch of industry. A commencement will be made with glass articles.

ALTHOUGH the late M. Thiers was not himself a man of science he was anxious to possess some knowledge of the several sciences in order to the writing of a work on philosophy on which he was engaged during a number of years. His teachers were chosen from amongst his brother academicians; M. Leverrier being his instructor in astronomy and M. Charles Saint Claire-Deville in chemistry. He began to write his work under Napoleon's rule, desisted when he resumed his political career, and worked it up again when he resigned his presidentship. It is not yet known whether it will be published in its present imperfect form. At the time of his death he was revising what had been written in order to bring it up to the level of new scientific discoveries. Although Thiers was more than eighty years of age he was not the oldest member of the whole French Institute. The dean by age is now M. Chevreul, a man of extraordinary debating power, and who the very day of Thiers' death read before the Academy of Science an admirable chemical paper referred to in this week's report of the Paris Academy.

Mr. Layard, the British ambassador at Constantinople, has received a firman from the Sultan authorising excavations at Nineveh.

Several members of the enterprising Birmingham Natural History Society spent last week in a dredging excursion at Arran, Brodick being made the headquarters. The excursion was eminently successful, and several objects of considerable rarity were obtained. An interesting account of the excursion appears in the *Birmingham Daily Post* of September 10.

At the meeting of delegates held to discuss the formation of a Midland Union of Natural History Societies on August 28, at the Midland Institute, a basis of union was unanimously agreed to. The Union is to be governed by a council composed of two members from each society included within it, one of these members to be a secretary of the society. The annual meetings are to be held in the various towns in which are located the societies forming the Union. The president of the society in association with which the annual meeting is held shall be president of the Union for that year, and each annual meeting shall decide where the next is to be held. The levy from each society is to be 1*d.* per annum for each member, unless the members shall be less than twenty-four in number, when it shall be 2*s.* for the whole of the society. A monthly journal is to be published by the Union similar to the *West Riding Naturalist*, to be called the *Midland Naturalist*. The following Sub-Committee was appointed to arrange various matters:—Messrs. Lawson Tait, James Bagnall, John Morley, Egbert D. Hamel, and Charles Perks. The first meeting of the Council will be held at the Midland Institute, Birmingham, on Tuesday, October 2, at 5 P.M.

London now possesses an aquarium tank believed to be the largest in existence. By removing the partitions between several of the tanks in the Westminster Aquarium, the present naturalist, Mr. Carrington, has arranged one capable of holding 94,000 gallons. It is 150 feet long, 20 feet broad, and the depth of the water will vary according to circumstances. The tank is intended for the exhibition of large fish.

A shock of earthquake was felt at Bagnères de Bigorre at 2 P.M. on Friday, its direction being east to south-east, and its duration five seconds.

Local societies have organised in Switzerland a large number of district museums so arranged that the natural characteristics of the country are always open to the inspection of the public. The extent of these collections is sometimes astonishing. We have been favoured with a catalogue of the Vevey Cantonal Museum, from which we learn that it possesses 415 zoological objects, three different herbariums, four mineralogical collections, fifteen objects of ethnography, twenty-five archæological relics found in the country, 650 pieces of money or medals, complete laboratories of physics and chemistry, and a library. Vevey is a small country place having only 8,000 inhabitants.

The Council General of Guadeloupe have offered a premium of $20,000 for the best new process of extracting juice from sugar-cane, the cost not to exceed forty per cent. of the market value of the product. Applications may be made up to June 1, 1880.

We have referred to the expedition to Cambodia, headed by Dr. Harmand, on behalf of the French Government. A large parcel containing a number of natural history specimens has arrived at Paris for the Museum, from the expedition.

The Germanic Museum at Nürnberg celebrated the twenty-fifth anniversary of its existence on the 16th ult. The celebration was simple, dignified, and in good keeping with the national character of the institution. The foundation-stone of a new wing of the building of the museum was laid, the funds for this enlargement having been supplied by the German Government. The director, Herr Essenwein, addressed the company assembled, and gave an account of the development of the museum, pointing out that the institution was the result of common efforts made by the whole nation; that princes and people had equally contributed towards the furtherance of the work, and that the new wing would bear the Imperial arms upon its façade as a sign of its origin.

The European staff for the first international station to be established in Africa has been completed. It consists of Messrs. Cambier, Crespel, and Mais. The Austrian traveller, Ernst Marno, will accompany the expedition in the capacity of naturalist. The expedition will proceed to Natal in the Union Company's Royal Mail steamship *Danube*, appointed to leave Southampton on October 18 next, direct for Algoa Bay and Natal. The expedition will remain at Natal for a week or ten days, perfecting their arrangements, and will then go on to Zanzibar, for Tanganyika, in the same Company's steamship *Natal*.

Among the papers in the just-published part of the *Zeitschrift* of the Berlin Geographical Society are letters from Dr. Erwin von Bary to Baron von Richthofen on the travels of the former in North Africa; the itinerary of Dr. Pogge from Kimbundo to Quizemene, the Mussumba or residence of Muata Jamwo, and further eastwards to Inchibaraka, from September 16, 1875, to February 28, 1876; two papers on Persia, one by Dr. Kiepert on Dr. Stolze's journey in South Persia in 1875, and a description by Gen. Schindler of little known routes in Chorassan. Capt. von Schlienitz contributes a paper of much interest on the geographical and ethnographical observations in New Guinea, the New Britannia and Solomon's Archipelago, obtained by the Austrian *Gazelle* expedition. To the *Verhandlungen* (Nos. 5 and 6) of the same Society Baron von Richthofen contributes a paper of much historical value on the Central Asiatic silk routes up to the second century of our era.

At the last meeting of the Niederrheinische Gesellschaft für Natur und Heilkunde of Bonn, Herr Siegfried Stein reported on some new mirrors made of rock crystal and agate, and used for reflecting sextants. Dr. H. Eylert, the astronomer to the Deutsche Seewarte at Hamburg, had pointed out to him that glass mirrors lose their correct shape in course of time, or turn dim and render impossible the exact determination of the sun's altitude. The new mirrors are free of these faults.

Throughout the past week, says the *Sussex Advertiser*, Col. A. Lane Fox has been engaged, with several workmen, in making some interesting excavations into Mount Caburn, on behalf of the combined committees of the British Association and Anthropological Institute. A number of pits were found in the interior of the camp, and some of them have been opened. They are of different sizes, and between six and seven feet deep, and are of a square, oval, and round shape. They were evidently human habitations, and would contain perhaps two persons crouched up together, there not being room for them to lie extended. They were found to contain the bones of a great variety of animals used for food, but chiefly of the ox, pig, and goat, and the remains have been sent to Prof. Rolleston, of Oxford, for identification. The filling in of the pits appears to be of the late Celtic period, but whether the pits themselves are of the same age it is difficult to determine. A large basin-shaped shaft, sixteen feet deep, has been cleared on the south side of Mount Caburn. In this case it is also difficult to decide the object of the pit, but it appears in all probability to have been sunk by the inhabitants of an earlier period for the purpose of obtaining flints similar to those of Cissbury. A vein of flints was found near the bottom of the shaft, but there are no galleries, as is the case at Cissbury, where they are perfect in the shafts that have been discovered. Probably in the present instance the flints were found to be unsuitable, and the works were abandoned. On Saturday a section was cut through the rampart in order to ascertain by the pottery whether it was of the same age. Large quantities of pottery were found, which was of an earlier period to that in the pits in the interior, indicating that the rampart is probably of an earlier date, and that the fort was subsequently occupied by a later race of people in the Celtic age. At the bottom of the pits were discovered several implements of the late Celtic type—amongst other things a knife, battle-axe, and a kind of iron spud; also a bone comb.

THERE have just been placed at the entrance to the South Kensington Museum four magnified drawings of different stages of the Colorado beetle, drawn by Mr. Andrew Murray, F.L.S., naturalist to the Science and Art Department. They show the pupa—the "grub," as it is labelled, at full growth, the beetle at rest, and the beetle on the wing. This last is the most interesting drawing to people in England, as the appearance of the beetle at rest is now somewhat familiar through the many drawings and the models that have been issued. As Mr. Murray has studied the beetle in America, not only the shape, but the hue of the wings may be taken as correct. These are of a delicate pink, and look so beautiful that it might be welcomed in England as an addition to our insects were its ravages not so expensive. Of all the drawings of the beetle yet made public these are the most carefully drawn, but it is surely a mistake to place them where they are at present. They are really outside the turnstiles, as if not forming a portion of the museum.

A THIRD edition is announced by Hartleben, the Vienna publisher, of Brommy and von Littrow's work "Die Marine," a comprehensive treatise on the ocean and on navigation.

THE prospectus of a new work entitled "Ergebnisse physikalischer Forschung," by Dr. C. Bohn, Professor of Physics in Aschaffenburg, is being circulated by Engelmann of Leipsic. The work aims at giving the facts ascertained in physics, leaving out, as far as practicable, the processes by which they have been reached (a mode of treatment which offers certain advantages). Theories, hypotheses, and methods of experimentation are not wholly excluded, but the attention is limited to what seems useful and necessary in order to confidence in the correctness of the results. The work is designed especially as a preparation-book for examinations; also as a work of reference, for which purpose it will be fully indexed. The first part, just published, treats of I. Bodies and forces in general (as Introduction). II. General mechanics and gravitation. III. Physical mechanics. IV. The theory of heat (Part 1). Part 2 will also treat of IV. The theory of heat (second part). V. Radiation (light and heat). Part 3 will be devoted to VI. Magnetism and electricity.

THE *Kölnische Zeitung* publishes some interesting details regarding an excursion made by Herr Nikolai Sograf, a member of the Moscow Society of Naturalists, to the peninsula of Kanin in the Samoyede district. It appears that the natives showed themselves rather diffident towards the Russian traveller, and their want of confidence was still further increased when he proceeded to take measurements of their heads, extremities, &c. At last they evidently arrived at the conclusion that their reindeers and their tundras were to be taken from them and they themselves were to be transported far away, perhaps to the war now raging. The consequence of this conviction was a somewhat unpleasant intermezzo for Herr Sograt and his excursion. On one fine morning the traveller was aroused by a great noise and found that the Samoyedes were packing up their tents in great haste and preparing for an immediate departure into the interior of the country. All representations on his part were in vain, and he had to submit to being carried off. His position among these natives was, of course, a rather unpleasant one; his collections of insects, which were preserved in alcohol were destroyed, the preserving fluid finding its way into the stomachs of the Samoyedes. Herr Sograf was rescued at last by two fishermen from the Kanin Tundra coast, who had heard of his awkward situation. He arrived safely at Mesen after some time, and thence addressed a narrative of his adventures to the Russian newspaper the *Golos*. His courage and spirit seem, however, to be quite undaunted, as he has the intention to start at once upon another expedition to Cape Sswyatoi-Noss.

IN compliance with a suggestion from M. Engelhard, a member of the Municipal Council of Paris, the Prefect of the Seine has ordered photographs to be taken of every existing plan of the city of Paris, so that it will be possible to see all the series of transformations experienced by the city from the most remote period when such plans were made up to the present age.

FLAGS have been hoisted on the principal buildings of the Paris International Exhibition, which, according to the habit of French working-men, is an indication that the external part may be considered as having been quite completed. The part allotted to England has been given over to the architect of the English Government.

THE *American Journal of Science* records the death in Utah of Dr. Charles F. Winslow, formerly of Boston, at the age of sixty-six. Dr. Winslow has written numerous articles on physical science, relating more especially to earthquake phenomena, which he observed extensively during his residence of many years in California, South America, and elsewhere.

DRS. YARROW AND COUES have lately published a list of the fishes found at Fort Maçon, North Carolina, in which 108 species are enumerated; of these eleven are sharks and rays.

IN a paper by Prof. Wright, of Yale College, published in the early part of this year, a method was described of producing metallic films on the inner surface of exhausted glass tubes, by the action of a succession of energetic electrical discharges. Prof. Wright has been continuing this investigation, and has arrived at important results, both theoretical and practical. It seemed probable that the surface of deposit would be dull, but this proved incorrect, and the films when removed from the receiver presented surfaces of exquisite perfection, the most brilliant of which were comparable only to the surface of clean liquid mercury. This suggested the production of specula for optical purposes by this method, and Prof. Wright's subsequent inquiries have been directed to this end. Platinum seems to be the most suitable metal for the purpose; it is not readily tarnished, and can be cleaned with water or acids. By the new method it can be deposited on glass surfaces very easily, and a mirror of the most perfect surface produced at once. The adherence of the film seems very close. With silver, too, the process succeeds well, but it is more difficult to obtain good surfaces than with platinum, or gold, the metal being volatilised with extreme ease by the action of the current. The experiments, *inter alia*, showed it to be true of platinum and bismuth (as well as gold), that the light which has passed through a layer of metal varies somewhat with the thickness of the film. Platinum, with progressively thickening film, varies from a grayish tint to brownish, brownish yellow, deep yellow, and orange. This last colour is almost exactly complementary to that transmitted by silver, and Prof. Wright succeeded in getting a peculiarly white and brilliant reflecting surface by depositing first a thin stratum of silver, then one of platinum. The specula of a small

Gregorian telescope was covered with platinum by the method referred to, and with entire success. The larger mirror was about 4 ctm., and the time required for covering was about three hours, with a battery power equivalent to four or five Grove cells.

It is an interesting point to determine, even though only approximately, what amount of heat meteoric masses develop in their motion through the atmosphere. M. Schiaparelli has proved that to calculate the loss of velocity of a body which penetrates the atmosphere, it is not necessary to know the law according to which the density of the air varies in the different layers traversed, but it is sufficient to know the barometric pressure at the two extremities of the course, or (which comes to the same) the weight of air displaced by the body whose initial velocity is known. Starting with this theorem, and taking the average velocity of falling stars as 50,000 metres per second (it varies between 16,000 m. and 72,000 m.), M. Govi estimates, in a recent paper, that a falling star, on reaching a part of the atmosphere where the barometric pressure is about 1 mm., will have its velocity already reduced to about 28,000 m.; coming to a region where the pressure is 10 mm., its velocity will be about 5,916 m., and at a pressure of 100 mm. (should the meteorite reach so far), the velocity will not be more than 506 m. Thus the initial velocity of bolides diminishes very rapidly, and may be almost entirely lost on reaching earth. Now, knowing the loss of velocity of a moving object of given mass, the quantity of heat developed can easily be deduced. Taking a bolide of 14·66 kilogrammes reaching an air layer where the pressure is about 1 mm., M. Govi finds the loss of *vis viva* of the object to correspond to the enormous number of 2,921,317 calories, which would readily explain all the accompanying phenomena of heat and light, and also mechanical effects.

Within the last year or two no spot on the American continent has furnished such an amount and variety of archæological material as the Santa Barbara Islands and the coast of California opposite to them. Dr. Yarrow, in Wheeler's report for 1876, describes his "Big Bonanza," as he calls it, on the main-land, near Santa Barbara; and Prof. Hayden has published an elaborate account of Mr. Paul Schumacher's researches made upon the islands. The crania and skeletons are counted by hundreds, and tons of stone implements, many of them of most beautiful workmanship, have been revealed by the winds blowing the sand from the burial-places. During the summer of 1877 Mr. Bowers has continued these explorations on behalf of the Smithsonian Institution, with the greatest success, and has found many new varieties of objects of stone, and in large numbers.

Mr. Gunn writes with reference to our report last week (p. 406) of a paper read by him at the late British Association Meeting:—"The new Silurian beds discovered near Widdybank Farm were stated in the paper to belong to the volcanic series of the Lake Country. It is the Cronkley Pencil Mill Shale which was referred to the Stockdale Shales *or* Pale Slates."

The additions to the Zoological Society's Gardens during the past week include a Mandrill (*Cercopithecus mormon*) from West Africa, presented by Mr. Francis Lovell; a Purple-faced Monkey (*Semnopithecus leucoprymnus*) from Ceylon, presented by the Misses Rowney; a Common Fox (*Canis vulpes*), European, presented by Mr. R. Hayssen, an Angolan Vulture (*Gypohierax angolensis*), a Vociferous Sea Eagle (*Haliaëtus vocifer*) from Africa, presented by Mr. I. A. Solomon; a Vervet Monkey (*Cercopithecus lalandii*) from South Africa, a Great Anteater (*Myrmecophaga jubata*), two Mealy Amazons (*Chrysotis farinosa*) from South America, a Short-toed Eagle (*Circaëtus gallicus*), a Common Genet (*Genetta vulgaris*) from Southern Europe, an Egyptian Vulture (*Neophron percnopterus*) from Africa, deposited.

THERMOMETRIC OBSERVATIONS MADE AT RAMA ON THE COAST OF LABRADOR

Two years' thermometric observations made three times a day at Rama, Labrador, about 60° north latitude, furnish the following monthly and annual means. The degrees are Centigrade.

	Monthly mean of temperature.	Absolute monthly minima. (Dates in parentheses.)	Absolute monthly maxima. (Dates in parentheses.)
	°	°	°
1874, August	+ 7·7	+ 2 (3)	+ 23 (8)
September ...	+ 4·9	− 1·5 (6, 7)	+ 16 (9)
October ...	− 0·7	− 8·5 (30)	+ 9 (5)
November ...	− 6·5	− 15·0 (27)	+ 7 (9)
December ...	− 15·2	− 22·0 (23, 24)	− 5 (6)
1875, January ...	− 17·8	− 27 (23, 24, 27, 28)	− 5 (26)
February ...	− 19·6	− 35 (19)	− 5 (13)
March	− 17·9	− 33 (8)	+ 2 (19)
April	− 8·1	− 20 (5, 6)	+ 3 (20, 21)
May	− 3·7	− 13 (1, 2, 3)	+ 10 (17)
June	+ 4·2	0 (1, 9, 14, 17, 18, 20, 23)	+ 15 (24)
July	+ 5·2	+ 1·5 (20, 22, 26, 28)	+ 17 (19)
August	+ 7·0	+ 1·0 (28, 31)	+ 16 (4, 20)
September ...	+ 2·3	− 7·0 (28)	+ 15 (1)
October ...	− 2·0	− 7·5 (30)	+ 4 (1, 8)
November ...	− 6·1	− 21 (26)	+ 2 (7)
December ...	− 15·4	− 31 (28)	+ 2 (6)
1876, January ...	− 20·5	− 30 (17)	− 7 (11)
February ...	− 19·1	− 32 (8)	+ 3 (25, 26)
March	− 14·8	− 34 (6)	+ 1 (23)
April	− 2·3	− 21 (4)	+ 10 (9)
May	+ 1·7	− 8 (7)	+ 10 (15)
June	+ 3·5	− 9 (6)	+ 11 (10, 30)
July	+ 6·5	+ 0·5 (7)	+ 20 (27)

The annual means resulting from these tables are—

For the first year, from August, 1874, to July, 1875, − 5°·51,
,, second ,, ,, 1875 ,, 1876, − 4°·93.

The annual extremes are—

In the first year, min. − 35°, Feb. 19; max. + 23°, Aug. 8,
,, second ,, − 34°, March 6; ,, + 20°, July 27.

The first year was sensibly more cold than the second; if we compare their means to those of the two preceding years—

1872 to 1873, − 4°·0; 1873 to 1874, − 5°·3;[1]

their results as the mean of the four consecutive years counting from the month of August, − 4°·93.

The observations were made at Rama by M. and Mme. Weiz, Moravian missionaries, with a thermometer sent from the observatory of Geneva. A barometer was recently sent from Kew to Naïn, another station of Labrador, to solve the question of the variations of atmospheric pressure in these regions.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE

London.—Prof. Morris, who for more than twenty years has held the chair of geology and mineralogy at University College, has resigned his appointment. The Rev. T. G. Bonney, fellow of St. John's College, Cambridge, and Prof. H. G. Seeley, of King's College, are mentioned as candidates.

Birmingham.—We have received the programme of the Birmingham and Midland Institute, which is quite as satisfactory as usual. Prof. Tyndall, the president, will deliver the inaugural address on the evening of Monday, October 1.

Upsala.—The celebration of the 400th anniversary of the foundation of the University of Upsala was brought to a termination on Saturday. The celebration, which lasted nearly the whole week, seems to have been thoroughly successful, and was enthusiastically joined in by all, both "town and gown," from the king downwards. Many foreign delegates were present. We hope to be able to give a detailed account of the event shortly. It is stated that the king has made the University a donation of 40,000 crowns, the yearly revenue from which is to be distributed as premiums to young authors of scientific works,

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[1] Nature, vol. xiii. p. 60.